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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/561,725

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Andreas Pein

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Hildebrand, Christa
Norris McLaughlin & Marcus PA
875 Third Avenue, 8th Floor
New York, NY 10022

EXAMINER

MILES, JONATHAN WADE

ART UNIT

PAPER NUMBER

3731

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,725	Applicant(s) PEIN, ANDREAS	
	Examiner JONATHAN W. MILES	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/11/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 27, 2010, has been entered.

Response to Amendment

This office action is in response to the amendment filed July 12, 2010. Claim 8 has been amended. Claims 8-14 are pending and addressed below. Claims 1-7 were previously canceled.

Claim Objections

Claim 8 is objected to because of the following informalities: "a generally cylindrical opening is formed in a casing" in line 5 should read "a generally cylindrical opening formed in a casing," and "wherein" should be omitted from line 15, and "when the piston is at rest at end of a downstroke" in lines 23-24 should read "when the piston is at rest at the end of a downstroke.". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 8, 9, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoder et al. (US 5871462) in view of McDonnell et al. (US 591184) and Pelmulder et al. (US 4818190), hereinafter referred to as “Yoder,” “McDonnell,” and “Pelmulder” respectively.

Yoder and McDonnell were cited in the previous office action.

Regarding claims 8, 9, 11, and 14, Yoder discloses a water jet apparatus for severing a biological structure with a jet of severing liquid comprising water (col. 3, line 64), the water jet apparatus comprising: a storage container for the severing liquid (Fig. 1, [30]); a piston-cylinder unit comprising: a generally cylindrical opening is formed in a casing having a wall and a bottom (Fig. 2, [64]); a piston received in the cylindrical opening for reciprocal motion of the piston in cylindrical opening with space remaining adjacent to the bottom of the cylindrical opening (Fig. 2, [60]), the space functioning as a pressure space upon downstroke of the piston and a suction space upon upstroke of the piston (Fig. 3, [86]); a manipulable operating terminating in a jet (Fig. 1, [40]); a suction line for conducting the severing liquid from the storage container to the suction-pressure space in the cylinder (Fig. 1, [32]); a pressure line for conducting the severing

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liquid from the suction-pressure space in the cylinder to the operating device (Fig. 1, [36]); and a coupling for attaching the eccentric drive to and detaching the eccentric drive from the piston (Fig. 2, [62]), the piston-cylinder unit together with the suction line, the pressure line, and the operating device constituting a sub-assembly, wherein the suction line is attachable to and detachable from the storage container and the cylinder casing by means of a first and second coupling and the pressure line is attachable and detachable from the manipulable operating device by a third coupling (see Fig. 1, col. 2, lines 59-61);

further comprising a protruding sealing lip formed on the cylinder (Fig. 2, [70];

but not opposite the bottom formed by the cylindrical opening, the cylindrical opening takes on a conical portion, or an annular membrane having an outer periphery attached to the conical portion of the generally cylindrical wall at a position in the upper zone of the piston-cylinder unit and an inner periphery attached to the piston at a position in the upper zone of the piston-cylinder unit, the upper zone defined by an annular space about the suction-pressured space, the membrane sealing interior of the piston-cylinder unit below the membrane from exposure to the ambient outside the piston-cylinder unit, and the membrane being dimensioned so as to allow reciprocation of the cylinder and the annular space being dimensioned so as to allow movement of the membrane therein as the piston reciprocates and to accommodate the membrane when the piston is at rest at the end of a downstroke; wherein at least a lowermost portion of the conical portion tapers inwardly in a downward direction toward the suction-pressured space; or a pressure tubule terminating in a jet; or wherein the suction pipe of the manipulable operating device is connected via an exhaust line to a pump.

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However, Pelmulder discloses opposite the bottom formed by a cylindrical opening, the cylindrical opening takes on a conical portion (Fig. 113, the taper between bores 114 and 116); an annular membrane (Fig. 113, [266]) having an outer periphery attached to the conical portion of the generally cylindrical wall at a position in the upper zone of the piston-cylinder unit (see Fig. 113, wherein the outer periphery is attached to the outer wall of the conical portion) and an inner periphery attached to the piston at a position in the upper zone of the piston-cylinder unit (see Fig. 113), the upper zone defined by an annular space about the suction-pressured space (see Fig. 113, wherein the suction-pressure space is opposite the upper zone), the membrane sealing interior of the piston-cylinder unit below the membrane from exposure to the ambient outside the piston-cylinder unit (see Fig. 113; col. 18, lines 29-35 discusses maintaining sterilization), and the membrane being dimensioned so as to allow reciprocation of the cylinder and the annular space being dimensioned so as to allow movement of the membrane therein as the piston reciprocates and to accommodate the membrane when the piston is at rest at the end of a downstroke (Figs. 113 and 114); wherein at least a lowermost portion of the conical portion tapers inwardly in a downward direction toward the suction-pressured space; or a pressure tubule terminating in a jet (see Fig. 113).

It would have been obvious to combine the membrane and conical portion taught by Pelmulder with the device of Yoder because it provides sterilization for the device (Pelmulder, col. 18, lines 29-35) and facilitates entry of the piston into the cylindrical opening (Pelmulder, col. 10, lines 14-17). The motivation for the modification would be to prevent bacteria from building up in the device, and to ensure smooth entry of the piston to reduce the likelihood of malfunction.

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Furthermore, McDonnell discloses a manipulable operating device (Fig. 1, [10]) including an internal pressure tubule terminating in the jet (Fig. 7, [36]) and a suction pipe sheathing the pressure tubule (Fig. 7, [100]), and wherein the suction pipe (Fig. 7, [66]) of the manipulable operating device is connected via an exhaust line to a pump (col. 6, lines 56-57).

It would have been obvious to combine the manipulable operating device of McDonnell et al. with the water jet apparatus of Yoder et al. because it allows for suction and jetting of water. The motivation for the modification would have been to remove excess fluid and emulsified tissue from the surgical site (McDonnell et al., col. 6, lines 67-69).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoder (US 5871462) in view of McDonnell (US 591184) and Pelmulder (US 4818190) as applied to claim 8 above, and further in view of Allen (US 3622251). Allen was cited in the previous action.

Regarding Claim 10, Yoder in view of McDonnell and Pelmulder discloses the water jet apparatus according to claim 8, but does not disclose the cylinder casing and the piston being constituted of plastic.

However, Allen discloses a cylinder casing and piston being constituted of plastic (col. 2, lines 69-71).

It would have been obvious to combine the plastic material of Allen with the piston and casing of claim 1 because plastic is more lightweight (Allen, col. 3, line 43). The motivation for the modification would be to make the apparatus more mobile.

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Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoder (US 5871462) in view of McDonnell (US 591184) and Pelmulder (US 4818190) as applied to claim 8 above, and further in view of Rogers (US 4551146). Rogers was cited in the previous action.

Regarding Claim 12, Yoder in view of McDonnell and Pelmulder discloses the water jet apparatus according to claim 8, further comprising: a connecting device installed in the cylinder for connected the pressure tube to the suction-pressure space (see Fig. 3 where the pressure tube [36] connects to the cylinder [26] and a first opening through the cylinder casing (Fig. 3, [112]), and a connecting device comprising a pressure sleeve press fit into the first opening through the cylinder casing for effecting communication of the pressure line with the suction-pressure space (col. 4, lines 41-45) but does not disclose the connecting device comprising a pressure tubule concentrically received in the pressure sleeve and having external ribs spaced from an interior wall of the pressure sleeve by a distance corresponding to thickness of a wall of the pressure line, the wall of the pressure line at an end portion of the pressure line being gripped between the ribs of the pressure tubule and the interior wall of the sleeve.

However Rogers discloses a connecting device comprising a pressure sleeve (Fig. 3, [30]), a pressure tubule concentrically received in the pressure sleeve (Fig. 3, [18]) and having external ribs spaced from an interior wall of the pressure sleeve by a distance corresponding to thickness of a wall of the pressure line (Fig. 3, [20]), the wall of the pressure line at an end portion of the pressure line being gripped between the ribs of the pressure tubule and the interior wall of the sleeve (col. 3, lines 41-43; see Fig. 4).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the pressure sleeve and the pressure tubule of Rogers with the water jet apparatus of claim 8 because it minimizes the possibility of a bacteria invasion (Rogers, col. 1, lines 59-60). The motivation for the modification would have been to disinfect the connection during its use (Rogers, col. 1, lines 12-13).

With regard the statement of intended use and other functional statements, they do not impose any structural limitations on the claims distinguishable over the prior art which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). The manner in which a device is intended to be employed does not differentiate the claimed apparatus from prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977).

Regarding claim 13, Yoder in view of McDonnell and Pelmulder, in further view of Rogers discloses the water jet apparatus according to claim 12, further comprising a second opening through the cylinder casing (Yoder et al., see Fig. 1 where the suction line [32] connects to the cylinder [26], see in more detail in Fig. 3), the second opening effecting communication of the suction line with the suction-pressure space (Yoder et al., col. 7, lines 39-41), but does not disclose the first and second openings being radially oriented and diametrically opposed with

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respect to the cylinder whereby the connecting device is installable in the first opening by initial insertion thereof through the second opening.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to place the first and second openings radially oriented and diametrically opposed with respect to the cylinder, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Response to Arguments

Applicant's arguments with respect to claim 8 have been considered but are moot in view of the new ground(s) of rejection.

Arguments were drawn to the claims as amended and have been addressed in the rejection above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN W. MILES whose telephone number is (571)270-7777. The examiner can normally be reached on Monday-Thursday 7:30 am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571)272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. W. M./
Examiner, Art Unit 3731

/Anh Tuan T. Nguyen/
Supervisory Patent Examiner, Art Unit 3731
11/05/10